

IN THE CLAIMS:

1-21. (Canceled)

22. **(Currently Amended)** An X-ray system having an X-ray-sensitive camera for the creation of tomographic X-ray images, which camera includes a first and a second image detector, wherein said first image detector is provided for the creation of a panoramic tomographic image and said second image detector is a face sensor for the creation of a 2D image, and means are provided for the creation of 3D images of a subvolume of the mandibular arch, which means create several 2D images from different directions and compute a 3D image therefrom using cone beam technology with associated reconstruction algorithms, and including adjustment means by means of which said camera and/or said image detector and/or said X-ray emitter and/or a primary diaphragm and/or combinations thereof can be are adjusted such that said second image detector present in said camera can be moved into is positioned in the optical path of said X-ray emitter.

23.-25. (Cancel)

26. **(Currently Amended)** An X-ray system as defined in claim 22, including adjustment means and/or control means by means of which said camera and an X-ray emitter can be are adjusted such

that ~~the-a~~ center of rotation lies in ~~the-a~~ subvolume to be imaged and both moved as a unit.

27. **(Previously Presented)** An X-ray system as defined in claim 22, wherein said adjustment means are provided in said casing of said camera or in connecting means between said camera and a support or on said support itself.
28. **(Previously Presented)** An X-ray system as defined in claim 22, including an installation for the creation of teleradiographic images with another image detector and, when said X-ray emitter is aligned for the creation of a teleradiographic image, said camera is disposed in the region of the optical path between said X-ray emitter and said image detector of said installation for the creation of teleradiographic images and is radiolucent in said region.
29. **(Currently Amended)** An X-ray system as defined in claim 22, including an installation for the creation of teleradiographic images with another image detector and the path of adjustment is such that, when the X-ray emitter is aligned for the creation of a teleradiographic image, said camera ~~can be~~ is moved out of the optical path between said X-ray emitter and said image detector of said installation for the creation of teleradiographic images.
30. **(Currently Amended)** An X-ray system as defined in claim 22, wherein said camera is mounted for eccentric displacement and, in a first position, said image detector is positioned in ~~the-an~~ X-ray fan

beam for the creation of a panoramic tomographic image and, in a second position, said image detector is positioned in the X-ray fan beam for the creation of a 3D image.

31. **(Currently Amended)** An X-ray-sensitive camera, comprising a first X-ray-sensitive image detector for the creation of a tomographic image, a second X-ray-sensitive image detector for the creation of plane images and wherein the two image detectors are disposed in a common casing, and said second image detector is disposed alongside said first image detector and including adjustment means for the purpose of causing, as desired, said first image detector or said second image detector to assume correct alignment relative to an X-ray emitter for the creation of the respective X-ray image, wherein said second image detector is disposed on a rear side of said first image detector.

32. **(Cancel)**

33. **(Currently Amended)** A camera as defined in claim 32, wherein said adjustment means and the two image detectors are housed in a common casing of said camera.

34. **(Currently Amended)** A camera as defined in claim 33, wherein said adjustment means are provided on said casing of said camera and in the a region of connecting means for the attachment of said camera to a support and said camera ~~can be is~~ variably displaced, as an entity, relatively to said connecting means.

35. **(Currently Amended)** A camera as defined in claim 34 An X-ray-sensitive camera comprising a first X-ray-sensitive image detector for the creation of a tomographic image, a second X-ray-sensitive image detector for the creation of plane images and wherein the two image detectors are disposed in a common casing, and said second image detector is disposed alongside said first image detector and including adjustment means for the purpose of causing, as desired, said first image detector or said second image detector to assume correct alignment relative to an X-ray emitter for the creation of the respective X-ray image, wherein said camera has a radiolucent region, and wherein said radiolucent region is disposed between or alongside said first image detector and said second image detector.